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**ASSESSING CRITICAL MASS STAFF SUPPORT
IN THE COMPTROLLER OFFICE, NAVAL AIR
FORCES COMMAND, U.S. PACIFIC FLEET
(COMNAVAIRPAC)**

by

Scott R. Vandermar

June 1995

Principal Advisor:

L. R. Jones

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**ASSESSING CRITICAL MASS STAFF SUPPORT IN THE
COMPTROLLER OFFICE, NAVAL AIR FORCES COMMAND, U.S.
PACIFIC FLEET (COMNAVAIRPAC)**

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Submitted in partial fulfillment
of the requirements for the degree of

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from the

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ABSTRACT

The National Performance Review (NPR), the Federal Workforce Restructuring Act of 1994, and federal budget decisions for FY 95 and beyond propose and require organizational restructuring and personnel reductions of 272,900 positions, twelve percent of the total federal civilian work force. The purpose of this thesis is to determine the critical mass level of civilian personnel needed to meet the mission and workload requirements of the financial management function at Naval Air Forces Command, United States Pacific Fleet (COMNAVAIRPAC). This study examines the impact of past and potential future resource restraint, under conditions of increasing workload demand and the capability of the command financial management staff to continue to meet mission requirements. It is the finding of this thesis that the level of financial management personnel at COMNAVAIRPAC has fallen below the critical mass level of staff resources needed. Conclusions on how to better manage the effects of staff reduction to sustain or increase organizational effectiveness and efficiency are presented.

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	DESCRIPTION	1
B.	OBJECTIVE	1
C.	RESEARCH QUESTIONS	1
D.	SCOPE AND LIMITATIONS	2
E.	RESEARCH METHODOLOGY	3
II.	BACKGROUND	5
A.	INTRODUCTION	5
B.	THE MOVEMENT TOWARDS CIVILIAN RESOURCE REDUCTION	5
1.	Executive Order 12839, "Reduction of 100,000 Federal Positions"	5
2.	National Performance Review Recommen- dations for Further Civilian Resource Reduction	6
3.	The Federal Workforce Act of 1993 (S. 1535)	7
4.	The Federal Workforce Restructuring Act of 1994	7
5.	The Response of the Department of Defense (DoD) and the Department of the Navy (DoN) to the NPR and Legis- lative and Executive Branch Resource Reduction Recommendations	8
C.	THE EFFECTS OF CIVILIAN RESOURCE REDUCTION ON DOD	10
1.	Methods for Executing Reductions	10
2.	Problems Associated With the DoD Approach to Civilian Resource Reduction	13
D.	FINANCIAL STRESS IN PUBLIC SECTOR ORGANIZA- TIONS	14

1.	Characteristics and Implications	14
2.	Financial Restraint Management Options . . .	14
3.	Recognition and Management of Financial Stress	16
4.	Long-Term Financial Stress Resolution . . .	19
5.	Adjusting to and Coping With Financial Stress	19
E.	THE CRITICAL MASS CONCEPT	20
1.	Definition and Application	20
2.	Critical Mass Resource Planning	21
3.	Core Resources for Budgeting	21
III.	ANALYSIS OF FUNDING LEVELS, WORKLOAD COMPOSITION AND MANPOWER UTILIZATION	23
A.	INTRODUCTION	23
B.	HISTORICAL FUNDING LEVEL	24
C.	HISTORICAL MANPOWER LEVELS AND WORKLOAD COMPOSITION	28
1.	Historical Manpower Comparison	28
2.	Workload Analysis for Fiscal Years 1989 to 1995	30
3.	Historical Analysis of Overtime and Compensation Time	36
D.	HISTORICAL PERSPECTIVE ON MANPOWER UTILIZA- TION AT COMNAVAIRPAC	38
E.	SUMMARY	46
IV.	APPLICATION OF THE CRITICAL MASS AND CORE RESOURCE CONCEPTS TO THE COMNAVAIRPAC COMP- TROLLER OPERATION	49

A.	INTRODUCTION	49
B.	THE CRITICAL MASS LEVEL OF STAFFING IN THE FINANCIAL MANAGEMENT FUNCTION AT COMNAVAIRPAC	50
C.	THE CONSEQUENCES OF CUTBACK MANAGEMENT AND STAFFING BELOW THE CRITICAL MASS LEVEL OF RESOURCE UTILIZATION	53
D.	MANAGING WITHIN THE RESOURCE RESTRAINT PROBLEMS AT COMNAVAIRPAC	57
E.	SUMMARY	60
V.	CONCLUSIONS AND RECOMMENDATIONS	63
A.	SUMMARY	63
B.	RECOMMENDATIONS FOR FURTHER RESEARCH	68
APPENDIX.	STREAMLINING THE PLANNING, PROGRAMMING AND BUDGETING SYSTEM PROCESSES	69
	LIST OF REFERENCES	71
	INITIAL DISTRIBUTION LIST	73

I. INTRODUCTION

A. DESCRIPTION

The subject of this thesis is the potential impact and response to the recommendations made by the 1993 National Performance Review (NPR) and the Federal Workforce Act Realignment of 1993 to reduce civilian positions in the federal government. This thesis specifically analyzes the effects of the reduction in the financial management component of the Comptroller Office at Naval Air Force Command, U.S. Pacific Fleet (COMNAVAIRPAC).

B. OBJECTIVE

The goal in the thesis is to assess the critical mass level of civilian financial management staffing required to support the comptroller function at COMNAVAIRPAC. A critical sub-objective is to evaluate the ADP support and training required to allow the financial management function at COMNAVAIRPAC to survive at this minimal staffing level. The final product is intended to allow COMNAVAIRPAC to manage or resist any further reductions of civilian staff.

C. RESEARCH QUESTIONS

The primary research question is:

What are the essential financial management functions at COMNAVAIRPAC required to successfully meet internal and external demands?

The following subsidiary research questions were developed to help clarify and supplement the principal research question:

1. What have been the historical staffing and funding levels of the financial management function at COMNAVAIRPAC?
2. How is the financial management work load defined and measured in the COMNAVAIRPAC comptroller organization?
3. How has this work load level changed between fiscal years 1989 and 1995?

4. Can a critical mass level of civilian financial management staff required to support the comptroller function at COMNAVAIRPAC be defined?
5. How could a critical mass level of civilian financial management staff be justified?
6. Can work load requirements be matched to critical mass staffing levels to justify the civilian financial management staff and funding support in the COMNAVAIRPAC comptroller organization?
7. What level of ADP system support and training would be required to maintain a smaller civilian financial management staff?

D. SCOPE AND LIMITATIONS

This thesis will be divided into two parts. The first part will present a historical perspective of changes made in the budgeting for and the staffing of the civilian financial management staff in the COMNAVAIRPAC comptroller office from FY89 to FY95, and the parallel fluctuations in work load composition, size and performance.

The second part will then analyze the impact of these historical changes and attempt to estimate the critical mass level of civilian financial management staff required. A determination will then be made of the level of ADP support and training required to support this minimal staffing level.

The full impact of potential and actual reduction in civilian resources in DoD and its effect on the performance of work load has not yet been measured. Determination of this impact is imperative in deciding where the line must be drawn between civilian resource reductions and the support required to maintain operational effectiveness and efficiency. At the present time it is unclear where precisely this line is to be drawn. So far the only consideration made has been to mandate the reduction in size of the civilian resource staffs in the federal government and the Department of Defense (DoD) and to streamline all administrative functions through enhanced ADP support.

E. RESEARCH METHODOLOGY

Bibliographical searches for research monographs, reports and studies related to the effects of civilian resource reduction in DoD were conducted at the Naval Postgraduate School Library using BOSUN and the Computer Search Services. This thesis will begin with an analysis of the literature that was discussed from this search to gain an understanding of the genesis of the movement towards the reduction of civilian resources in the federal government in general, and within DoD specifically.

Also utilized was the published literature on the critical mass concept and financial stress in public sector organizations. This literature serves as the foundation for establishing a means for defining the critical mass level of staffing at COMNAVAIRPAC.

A major portion of research material which will compose much of Chapter II and Chapter III of the thesis was obtained from COMNAVAIRPAC. Historical data on the funding, staffing and work load levels for the financial management function at COMNAVAIRPAC were obtained from the Budget and Manpower divisions. Comprehensive personal interviews with the COMNAVAIRPAC financial management supervisors and staff were utilized to determine the effects of the civilian resource reduction initiatives on work load composition, size and performance. On-site work performance measurement also was conducted for this purpose. Where clarification or support was required, follow up with the command staff were performed. Input from the thesis advisors was employed throughout this thesis to help develop research questions, clarify issues and help to focus and guide the thesis.

II. BACKGROUND

A. INTRODUCTION

This chapter will first provide the historical background on the genesis of the movement towards the reduction in civilian resources in both the federal government as a whole, and DoD in particular. The second part of this chapter will provide a brief review of the effects of civilian resource reduction at both the organizational and individual level, the methods used to realize civilian resource reductions, and the problems associated with the DoD approach to making these reductions. The third part of this chapter will assess the phenomenon of financial stress in public sector organizations and DoD in particular, brought on by effort to reduce the scope and size of the federal government to accommodate the increasingly tight budget constraints. The fourth and final part of this chapter will review the concept of critical mass in definition and application, how critical mass resource planning works, and the concept of core resources for budgeting.

B. THE MOVEMENT TOWARDS CIVILIAN RESOURCE REDUCTION

1. Executive Order 12839, "Reduction of 100,000 Federal Positions"

This order issued by President Clinton on February 10, 1993 initiated the movement towards civilian resource reduction in the federal government and mandated that several steps be taken in that direction. The first mandate was that each executive department agency with over 100 employees had to eliminate not less than four percent of its civilian personnel positions measured on a full-time equivalent (FTE) basis over fiscal years 1993, 1994, and 1995. The second mandate was that all vacated positions would be realized through attrition or early out programs. The third mandate stated that at least ten percent of the reductions should come from the Senior Executive Service, GS-15 and GS-14 levels or equivalent. The

final mandate required each department and agency to achieve 25 percent of its total reductions by the end of fiscal year 1993, 62.5 percent by the end of fiscal year 1994 and 100 percent by the end of fiscal year 1995.

2. National Performance Review Recommendations for Further Civilian Resource Reduction

The basic premise of Vice President Gore's 1993 National Performance Review (NPR) was to rid the federal government of layers of the bureaucratic red tape that have prevented it from operating at peak efficiency and effectiveness. The goal was to create systems that held people accountable for results rather than for processes (Gore, 1993, p. 13). One of the major vehicles suggested by the NPR to accomplish this goal was to break down the systems of micro-management and over-the-shoulder control that exists by down-scaling the federal structure. This in turn called for significant reduction in the number of personnel involved in the business functional areas of budgeting, personnel, procurement and finance. In 1993 there were roughly 700,000 federal employees whose job it was to manage, monitor, control and audit business functional areas, plus headquarters staff and supervisory personnel in field offices (Gore, 1993, pp. 13-14). This represents roughly one third of all federal employees.

The goal, as described by the NPR, was to reduce the number of civilian non-postal work force by 252,000 positions or not less than twelve percent (Gore, 1993, p. 14). This total reduction would include the 100,000 position reduction by fiscal year 1995 as mandated by Executive Order 12839 of February 10, 1993. The purpose was to eliminate some of the excessive layers of supervision that existed and to improve the conditions under which federal employees work. The end result would hopefully be a smaller, but more empowered, more inspired and more productive work force (Gore, 1993, p. 14). In today's world of ever tightening budget constraints, efforts to further reduce civilian resources will continue.

A number of tactics were developed in an attempt to meet the NPR's civilian resource reduction goals. Two of these tactics are described here. The first tactic to be employed was to determine and then attempt to eliminate all programs that were considered to be obsolete or duplicative. The second tactic would be to re-engineer the activities of the federal government and for DoD by further utilization of ADP systems and telecommunications networks to assist in the performance of government functions. The purpose of both tactics is clear: trim the fat from government organizations by eliminating unwarranted functions, and by streamlining processes that are required.

3. The Federal Workforce Act of 1993 (S. 1535)

This act was designed to assist the movement towards downsizing and right sizing the federal government by allowing agencies to employ voluntary separation incentive payments to encourage employees to resign or retire from federal service (Senate Report 103-223, 1994, p. 2). An important amendment to this act, sponsored by Senator William V. Roth, Jr., required an overall government cap on FTE levels in each of the six fiscal years following fiscal year 1993 to reach the 252,000 position reduction as outlined in the NPR (Senate Report 103-223, 1994, pp. 15-16).

4. The Federal Workforce Restructuring Act of 1994

This legislation reiterated the purpose of the Federal Workforce Restructuring Act of 1993 of realizing the number of reductions in federal civilian employees required by the NPR, while avoiding having to resort to involuntary separations. This act also put limitations on the total number of full-time equivalent positions allowed in all federal agencies each fiscal year as follows: 2,084,600 during fiscal year 1994; 2,043,300 during fiscal year 1995; 2,003,300 during fiscal year 1996; 1,963,300 during fiscal year 1997; 1,922,300 during fiscal year 1998; and 1,882,300 during fiscal year 1999 (Public Law 103-226, 1994, 108 STAT, 116).

The Office of Management and Budget, after consultation with the Office of Personnel Management was tasked with the continuous monitoring of all agencies and with making a quarterly determination of whether the not-to-exceed number of full-time equivalent positions was maintained. OMB then notifies the President and the Congress on the first date of each quarter of any determination of requirements not being met. Any agency that is determined by OMB not to have maintained the limitation on full-time equivalent positions is prohibited from hiring any employees for any position until OMB notifies the President and the Congress that the total number of full-time equivalent positions for all agencies equals or is less than the applicable number required (Public Law 103-226, 1994, 108 STAT, 116).

5. The Response of the Department of Defense (DoD) and the Department of the Navy (DoN) to the NPR and Legislative and Executive Branch Resource Reduction Recommendations

The Navy response to the NPR consisted primarily of two memoranda. These memoranda served to state the Navy position concerning civilian resource reduction recommendations in the administrative and financial management functions.

a. Streamlining the Planning, Programming and Budget System Processes

The first of these memoranda was released on October 25, 1994 by Ms. Deborah Christie, the Assistant Secretary of the Navy (Financial Management) (See Appendix). This memorandum emphasized NPR recommendations to implement updated automated financial systems and process changes to streamline the financial management function, prior to personnel reductions. On the other hand, the UnderSecretary of Defense (Personnel and Readiness) looked at the NPR recommendations and issued a memorandum outlining his own recommendations of across-the-board reductions in financial management, personnel, acquisition and administrative functional areas between FY1994 and FY2000 (Dorn, 1994, Attachments 1-3).

As Ms. Christie's memorandum pointed out, the across-the-board reductions would cost the Navy financial management function over 3000 positions in the proposed time span. Her memorandum further called for an immediate review of all aspects of Navy financial management processes in an attempt to streamline them and to soften the blow that the reductions would have. Included among the various recommendations to bring about long-term improvements was the suggestion to increase the utilization of automated systems in performing financial management functions. Other suggestions included a detailed review of the budget formulation process, to include determining possible streamlining of various budget exhibits, and a review of the funds allocation and control processes.

b. Civilian Reductions in Administrative Functions

The second Navy memorandum was released on November 21, 1994 by Rear Admiral W. J. Hancock, Director of Budget and Reports for the Navy. Rear Admiral Hancock's memorandum noted that the twelve percent reduction in the number of civilian federal work force positions originally recommended by the NPR had turned out to be 272,000 positions in total, to be accomplished by the end of fiscal year 1999 (Hancock, 1994, p. 1).

Rear Admiral Hancock's memorandum also identified each individual functional area by series targeted by the UnderSecretary of Defense (Personnel and Readiness) for an across-the-board four percent per year cut. One of the functional areas was identified as financial management processes, consisting of the following series: Series 500- finance, accounting, auditing, payroll and budget, and Series 1160- financial analysis. Each major claimant was then tasked with providing their planned four percent reductions by fiscal year in each functional category, and with identifying the management efficiency initiatives they will use to achieve the reductions.

C. THE EFFECTS OF CIVILIAN RESOURCE REDUCTION ON DOD

1. Methods for Executing Reductions

At the DoD level, civilian resource reductions always have and will continue to reflect U. S. national security needs, budget reductions, efforts to streamline organizations and efforts to close and consolidate bases (CBO, 1994, p. 1). Due to the ongoing draw down of military forces, DoD has had extensive experience with employment reduction. The following is an analysis of some of the DoD options in executing civilian resource reductions and their implications.

a. Reduction-in-Force (RIF)

This method is adopted when the normal attrition of personnel is not enough to achieve the required reductions resulting from work load changes, facility closures or streamlining of organizational functions. A RIF is most effective in situations where reductions are concentrated in certain organizations, skill areas, or geographic locations (CBO, 1993, p. 8). Since most DoD civilian resource reductions are widespread, RIF's have not yet had a wide application in DoD. This is partly due to the fact that the mere mention of possible RIF will induce some workers to find new jobs or retire if eligible.

The major concerns associated with the use of this method for civilian resource reduction focus on the potential negative morale effect on workers and the associated decline in productivity, and the equity issue that arises in laying off more women and ethnic minorities due to their lack of seniority. Ability to define the work load for the new level of employment under this method can also be a problem. For these reasons, the RIF method has been used in DoD only as a last resort.

b. Hiring Freezes

This concept involves prevention of the replacement of employees who leave and is by far the most common method of meeting civilian resource reduction goals in DoD. Seldom are complete hiring freezes utilized due to the concern for effects on essential work load. DoD managers have been permitted to adopt their own replacement rates for each occupational rating under partial hiring freezes to avoid a mismatch developing between the work load requirement and the skill level of the remaining employees through a system of waivers. The hiring freeze that continues in DoD was established under the Bush administration.

The drawback of this method occurs when applied to situations where there is a rapid reduction in work load or a concentration of reduction in a particular skill area due to management streamlining or facility closures.

c. Early Retirement Without Incentives (ERWI)

This method allows employees to retire at a younger age and with fewer years of service than under regular retirement. ERWI has increased in popularity in DoD in recent years in order to avoid RIF's. By allowing personnel to retire before being eligible for regular retirement, this opens up positions for potential reallocation to personnel who are facing a RIF in another DoD organization.

The major drawback of this method is that many workers resist retiring early due to loss of job and the financial penalty that is involved. The amount of pension received under this method is significantly less than if they worked until eligible for regular retirement. Another problem with ERWI is that in hard economic times even fewer people are willing to accept a lower pension. The availability of separation incentives provides yet another deterrent to early retirement.

d. Separation Incentives

This is another method that has gained great popularity in recent years in DoD. Separation incentives are designed to avoid having to execute RIF's, to soften the blow on civilians who are losing their jobs and to streamline the work force. When incentives are targeted towards employees in jobs that are to be abolished, managers may not have to replace those employees to meet work load requirements. DoD in particular has targeted separation incentives to ease the transition for civilians affected by impending layoffs.

In 1993, the Congressional Budget Office (CBO) estimated that 14,600 civilians were going to have to be involuntarily separated to meet mandated reductions and budget restrictions. The implementation of separation incentives was able to reduce this number to 3000 actual involuntary separations and reduce the stress and strain placed on employees that are involuntarily separated. Separation incentives were also credited with allowing DoD to reduce employment at a much faster than anticipated rate. In fact, the DoD civilian work force was reduced by about 25,000 more than expected as of the end of FY1993.

Separation incentives also have several drawbacks as a method to meet civilian resource reduction goals. First, they are likely to reduce normal turnover both before and after they are offered due to the anticipation of their offering. Secondly, as the number of employees eligible for early or regular retirement diminishes, offering separation incentives may not affect turnover as much as anticipated. Finally, the use of separation incentives may lead to the loss of employees that the organization can least afford to lose, and may lower the efficiency of the operation.

The overall point in analyzing the various methods of executing civilian resource reductions is that managers in DoD must evaluate individual circumstances in deciding which

path to take. Each method has its own advantages and drawbacks that must be considered. The best solution in many cases may be to use a combination of methods to cancel out the existing drawbacks and magnify the advantages. The important common thread that exists among all of the methods is the difficulty in trying to define and structure a work load level to match the reduced work force.

2. Problems Associated With the DoD Approach to Civilian Resource Reduction

In reviewing the challenges that exist for DoD in attempting to reduce the size of the civilian resource component, the General Accounting Office (GAO) identified the following two problems that must be addressed (GAO, May 1993, pp. 5-7).

a. Managing Work Has Become More Difficult

Many managers in DoD feel that the across-the-board reductions in civilian resources recommended by the NPR are not always correlated with decreasing work load requirements, or that when work load requirements are increased, there is difficulty in acquiring the additional staffing needed. The common opinion among managers in DoD appears to be the concern that work force constraints are driving work load rather than work load requirements being used to define work force levels. This appears to be a major consideration that will continue to plague DoD managers into the future unless it is addressed.

b. Work Force Imbalances

One of the GAO findings was that DoD reliance on freezes and voluntary attrition to achieve mandated reductions has led to imbalances in the work force. These imbalances can be one of two types. The first type is that of skill imbalances where work load or mission requirements increase, but hiring constraints prevent the acquisition of the additional personnel required. Skill imbalances also can be exacerbated by reductions in training budgets, that inhibit manager ability to re-train workers for new positions. This

occurs mainly when personnel awaiting a RIF are utilized to fill a vacancy created by a voluntary separation, but the funds do not exist to train the employee for the new position.

The second type of imbalance is the demographic imbalance that normally results from a major reduction in the hiring of entry level personnel, and a much larger loss in younger and less senior workers through both voluntary and involuntary separations. Demographic imbalances may result in a top-heavy, rigid and more senior work force.

D. FINANCIAL STRESS IN PUBLIC SECTOR ORGANIZATIONS

1. Characteristics and Implications

Financial stress in the private sector is characterized by a difficulty in balancing revenues and expenditures over an extended period of time. In the case of public sector organizations such as the Navy and DoD, financial stress has been created by the continuous budget cutbacks over the last eight years. This phenomena contradicts the perception of our society and economy over the last 30 or so years of continuous growth in government, but is one we may have to get used to during the effort to balance the federal budget.

The concept of resource retrenchment is difficult for the politicians who wish to continue to reward their constituents, for DoD managers who wish to maintain their programs and their jobs, and for the citizens who wish to continue to benefit from the services provided by the government and DoD. Financial stress stems from the fact that these groups must struggle with the idea of giving up the benefits they derive from continuous growth in government.

2. Financial Restraint Management Options

In the overall attempt to manage the effects of financial stress brought on by resource restraint, there are at least the following options available: 1) doing nothing, which is a very short term option in an environment where financial

stress is prevalent; 2) increase revenues; 3) reduce expenditures; 4) increasing employee and organizational productivity; and 5) develop a set of more innovative responses that are productivity related (Jones, 1985, p. 90).

In the DoD environment, the options of doing nothing and increasing revenues are not practical, which leaves three possible options in attempting to manage financial stress. The option most used by DoD presently is the reduction of expenditures primarily through tight budget constraints. The options of increasing employee and organizational productivity and developing more innovative productivity related responses through streamlining of organizations and their activities, and by increasing automation, are supporting strategies. The following is a depiction of typical expenditure reduction options.

The first option is across-the-board or horizontal expenditure reductions that initially concentrate on program support funds to avoid having to make personnel reductions. When these support funds have withered away to nothing, as is the case in DoD, the next step is personnel and program reduction. Across-the-board reductions are directed at all organizational and support units (Jones, 1985, p. 91).

The second option is specific program reduction which involves reducing some programs and positions without eliminating them completely. These are across-the-board type reductions that are directed at specific organizational units and not all units. Initially DoD attempted to restrict action to these types of reductions, but have now been forced to tend towards across-the-board reductions as budget restraint tightens. Part of the reason for the proliferation towards across-the-board cuts involves the political issue of why some organizations are cut and others are not. Across-the-board cuts not only allow for broader reductions during periods of fiscal constraint, but are also easier to implement and

explain. Every unit in the organization feels an equal impact.

A third option and the most extreme is program termination and merger or vertical reductions. This option results in termination of organizational units or programs and possibly the absorption of their responsibilities and staff into other units. In DoD this type of reduction first materialized in the form of the closing of bases and the termination of organizational units deemed expendable. As resource restraints continue to tighten, this type of expenditure reduction has taken the form of the elimination of specific mission areas of critical organizations throughout DoD, and the continued reduction of the size of the civilian and military work force.

3. Recognition and Management of Financial Stress

The following is a review of a model of the response of public organizations to financial crisis and prolonged financial stress (Jones, 1985, pp. 93-100). This model was developed to permit the identification and understanding of the events that tend to characterize financial stress management in public sector organizations. This ten phase model has been modified for DoD application.

Phase 1: This phase involves ignoring the existence of a financial crisis, moderate reductions in expenditures and the characterization of the condition as temporary. This phase usually begins in the first year of the financial crisis.

Phase 2: This phase involves instituting short-term across-the-board expenditure reductions and takes place somewhere between the six month and two year mark of the financial stress condition.

Phase 3: This phase involves the recognition that financial stress may persist for longer than expected, the placing of blame for the condition and the citing of ad hoc "invisible" expenditures reductions like support and adminis-

trative funding. The third phase usually exists into the second year of financial stress.

Phase 4: This phase involves broader across-the-board expenditure reductions, the imposition of salary and hiring freezes, the birth of efficiency-oriented program cost studies, the improvement of work load cost measures, the reduction of non-essential services and the examination of high-value programs for reduction. Phase four usually exists between the first and third years of financial stress.

Phase 5: This phase involves the continuance of across-the-board reductions accompanied by additional reductions in specific programs, the appearance of some RIF's, the undertaking of more serious program and policy evaluation, the development of "hit lists" of programs for possible termination, the spread of rumors and heightening of employee tension, further reduction or elimination of nonessential and support services, and a weakening of the adaptive capability of the organization. Phase five takes place between the first and third years of financial stress.

Phase 6: This phase involves more RIF's and some job terminations due to continued across-the board-and specific program reductions, the transferring of some employees to other units and the absorption of some functions by other units, the drop of employee productivity and morale, the seeking of jobs outside the organization by some skilled and highly valued employees, and the realization by organization heads that better and more comparable program information is required. Phase six may occur during the second and third years of financial stress.

Phase 7: This phase involves the implementation of further program terminations, the recognition by DoD leaders that longer term strategic planning is required to integrate program and financial strategies, recognition of the need to restore some expenditures, reexamination of program priorities and reduction decision criteria, the use of political

contacts in an attempt to avoid further reductions, the development of budgeting and planning processes to help improve employee participation, and the possible change in leadership in response to political or administration demands. Phase seven may occur during the third to fifth years of financial stress.

Phase 8: This phase involves the development and implementation of long-term program and financial planning, the re-evaluation of DoD missions and objectives, discontinuation of RIF's and terminations, modification and examination of budgetary strategies, acceptance of continued resource reductions, consideration or implementation of major reorganization plans, and the greater involvement of Congress and other external participants in DoD program and financial review. Phase eight may take place between the third and fifth years of financial stress.

Phase 9: This phase involves the implementation of program and financial plans, the undertaking of function and responsibility reorganization, the significant increase in expenditures in some areas for one or two years, setting planning and budgeting service priorities over the long term, hiring of some new employees in specialized areas, development of new DoD missions and objectives, improvement of employee productivity and morale, and renewal of confidence in DoD leadership. Phase nine may begin in the fifth year of financial stress, if it occurs at all.

Phase 10: This phase involves increasing expenditures over a three-or-more year period, the renewed capability for financing of new programs and innovation, the re-opening of some closed programs, the search for new budget problem solutions, the development and testing of innovative technologies, the improvement in integrating program and comprehensive financial planning, and the improvement in public support for federal government and DoD. Phase ten may take place beyond the fifth year of financial stress.

When evaluating this model, and trying to determine where DoD falls in it today, a best guess would be either phase six or seven in terms of methods of reduction and organizational strategy. In this situation, as is the case when attempting to apply any model to a real world scenario, there are also certain aspects of several of the later phases of the model that can be recognized in DoD presently.

4. Long-Term Financial Stress Resolution

Faced with the pressure of continued reduction in budgets into the near future, DoD is faced with the reality of more vertical cuts of programs and missions as across-the-board reductions are exhausted. At the same time, the remaining programs and organizations must continue to be refined and streamlined to accommodate further resource reductions. A major source of this refinement and streamlining will have to be the investment in systems automation and the accompanying training and support.

The development and training of employees can be curtailed in the short-term to some extent with little or no repercussions, but long-term curtailing of employee training will cause major productivity problems, especially in areas of new systems and technology (Jones, 1985, p. 107). In addition, the negative morale effects resulting from the continued threat of personnel reduction and lack of incentives also will hurt productivity. These factors must be taken into consideration when evaluating the long-term impact and possible resolution of financial stress.

5. Adjusting to and Coping With Financial Stress

In the current DoD environment, the existence of financial restraints and their resultant financial stress are a reality. Therefore, DoD must realize the existence of financial stress and cope with it by managing it one step at a time. In order to do this, DoD must overcome the bureaucratic rigidities and constraints that exist in its structure.

Some of these rigidities and constraints include the tendency to defend individual programs or organizations instead of trying to solve problems, plus problem avoidance and eliminating resistance to organizational and functional change in structures. Inability or reluctance to adapt may increase the probability of failure.

The first step is for DoD to recognize the rigidities and constraints that exist, and then devote more resources towards overcoming these factors. This in turn will allow for better management of financial stress and organizational change. Application of a critical mass method for defining essential staffing levels may aid this process.

E. THE CRITICAL MASS CONCEPT

1. Definition and Application

As applied to DoD, critical mass is that level of resources that is absolutely essential to perform work load and mission requirements. Critical mass staffing is the level below which a unit or organization cannot operate and still meet its mission requirements. The responsibility for determining those work load and mission requirements should be placed on the operational and management personnel within the organization. This requires both bottom-up and top-down communication.

The critical mass approach is intended to aid the various components of DoD in adapting to congressional budget constraints and reduced resource availability. This approach also may provide the vehicle to proper financial planning and decision-making appropriate to an environment of fiscal restraint. Under this model, "core" resource requirements are determined to match the work load level of the organization. One critical assumption that must be maintained under the critical mass approach is that a consensus can be established on organizational mission and work load requirements.

2. Critical Mass Resource Planning

The key concept in critical mass resource planning is the ability of the individual organizational unit to capture work load and mission requirements to justify the allocation of resources necessary to achieve the desired productivity level. This is especially crucial in an environment of restricted financial resource availability.

The critical mass approach to resource planning and decision making assumes that the operational and management personnel define the resources required to fulfill their mission and work load requirements. The overall objective of this approach is to sustain individual organizational unit productivity to strengthen the overall performance of the Navy and DoD in the face of financial stress.

3. Core Resources for Budgeting

Once the critical mass level is determined based on mission and work load requirements, the next step is to define the level of resources required to support the critical mass to guide budgetary decision making and allocation. This is accomplished through the application of the concept of core resources. Core resources are those needed to support the critical mass staffing level. The minimum staff required at COMNAVAIRPAC to accomplish the financial management function may be defined as the core civilian resource staff.

To translate operational unit requirements into resource needs, the critical mass and core budgeting approach requires upper level management, which makes the civilian resource allocation decisions, to have an understanding of what the work load definition and requirements are. This allows them to visualize how the civilian resources are being utilized and to make more informed allocation decisions.

The critical mass and core budgeting approach may improve accountability for resource decision making by more clearly defining the relationship between resource inputs (personnel) and the required outcome (mission responsibilities). By

providing more useful information, this approach may allow DoD resource allocators to more clearly set priorities over mission requirements and resource allocation needed to meet those requirements. The critical mass approach is to be viewed as a planning option open to DoD managers in making day-to-day personnel decisions. This approach will be further evaluated and applied specifically to the financial management function at COMNAVAIRPAC in subsequent chapters.

III. ANALYSIS OF FUNDING LEVELS, WORKLOAD COMPOSITION AND MANPOWER UTILIZATION

A. INTRODUCTION

To help provide impetus for the application of the critical mass approach to the financial management function at COMNAVAIRPAC, an analysis of historical fluctuations in the levels of funding, workload demand composition and utilization of available manpower is required. In today's environment of fiscal constraint, such analysis may provide the perspective for utilizing the critical mass approach to strengthen budget justification. The ability to directly link resources to mission accomplishment is intended to provide the mechanism to strengthen COMNAVAIRPAC negotiating strategy in facing further resource reduction.

In the research for this thesis, comprehensive personal interviews were conducted with the following COMNAVAIRPAC personnel: the comptroller, the budget officer, the accounting officer, four budget analysts, an accounting technician and the director and assistant director of civilian personnel programs. In-house data were collected on budget to end strength levels, overtime and compensation time accumulated, and the relationship between financial management positions authorized and filled for fiscal years 1989-1994. Detailed position descriptions for five key financial management positions were obtained to help discern changes in the workload composition over this time period. The findings of the 1993 Efficiency Review conducted at COMNAVAIRPAC by CINCPACFLT were obtained to provide an outside perspective on the efficiency of manpower utilization in the type command financial management function.

This historical analysis of the effects of fluctuations in funding levels, workload composition and manpower utilization focuses on the experience, evaluation and judgment of those interviewed, and the interpretation of the statistical

data. The intent is to depict the environment of fiscal stress, combined with decreasing personnel resources and increasing workload demands that has existed in the command, and to assess whether the critical mass approach may be applied to this situation.

Based on the interviews conducted and the study of pertinent data and material, this chapter specifically addresses the research questions posed in Chapter I:

1. What have been the historical funding and staffing levels of the financial management function at COMNAVAIRPAC?
2. How is the financial management workload defined and measured in the COMNAVAIRPAC Comptroller's organization?
3. How has this workload level changed between fiscal years 1989 and 1995?

B. HISTORICAL FUNDING LEVEL

The first step in attempting to set up a framework for determining the critical mass level of financial management staffing at COMNAVAIRPAC is to review annual appropriations between fiscal years 1989 and 1994 compared to the personnel end strength and actual work years. The appropriation breakdown by fund code, in nominal dollars, is depicted numerically by Table 1. Table 2 depicts the same appropriation breakdown adjusted to 1989 constant dollars. Figure 1 graphically depicts the total appropriation breakdown by fund code for the relevant fiscal years by comparing the trend in both nominal and 1989 constant dollars. These figures are the annual planning figures that represent the year end authorization amounts for COMNAVAIRPAC.

FY	701E	702E	705E	708E	70AE	70BE	70CE	TOTAL
1989	21.9	1,590.9						1,612.8
1990	27.9	1,569.9						1,597.8
1991	34.9	2,132.3						2,167.2
1992	31.2	1,846.5		8.2				1,885.9
1993	46.7	1,831.1	24.1	9.7				1,911.6
1994					1,758.2	85.7	148.3	1,992.2

Table 1. COMNAVAIRPAC fiscal year 1989 to 1994 appropriation breakdown by fund code. (Millions of dollars) (in nominal dollars) (701E = tactical forces, 702E = general purpose forces, 705E = real property maintenance, 708E = family services and child care, 70AE = aircraft funding, 70BE = ships, administration and temporary additional duty (TAD), and 70CE= strategic communications staffing)

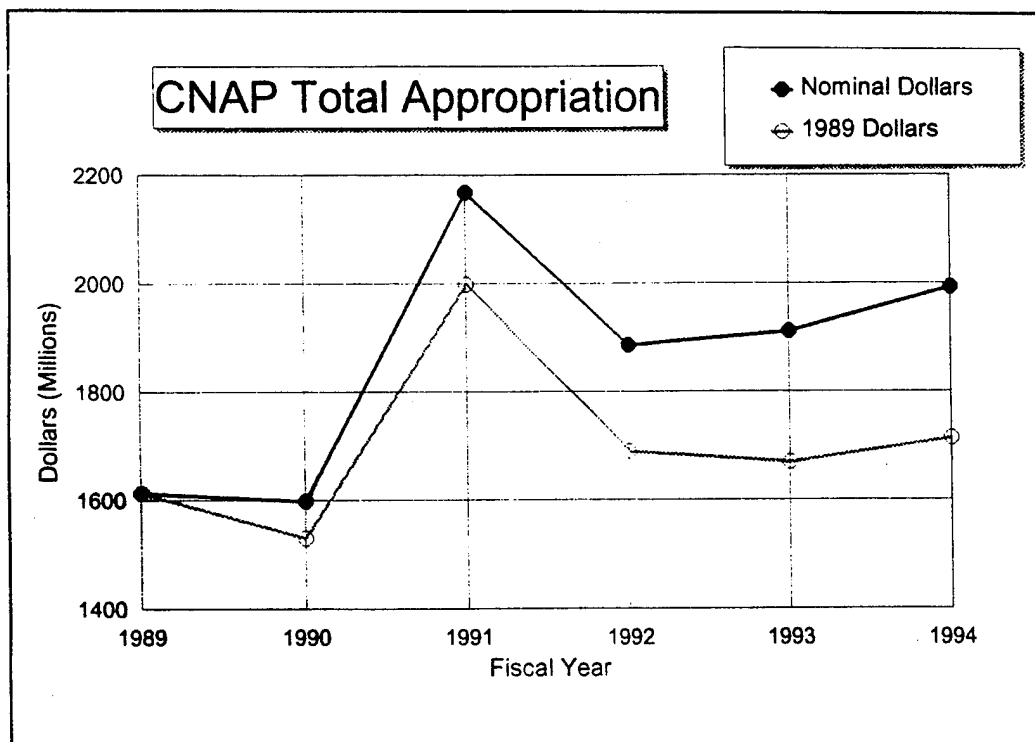


Figure 1. CNAP Total Appropriation

FY	701E	702E	705E	708E	70AE	70BE	70CE	TOTAL
1989	21.9	1,590.9						1,612.8
1990	26.7	1,503.4						1,530.1
1991	32.2	1,965.6						1,997.8
1992	28.0	1,654.4		7.3				1,689.7
1993	40.8	1,599.6	21.1	8.5				1,670.0
1994					1,512.8	73.7	127.6	1,714.1

Table 2. COMNAVAIRPAC fiscal year 1989 to 1994 appropriation breakdown by fund code. (Millions of dollars) (in 1989 constant dollars) (701E = tactical forces, 702E = general purpose forces, 705E = real property maintenance, 708E = family services and child care, 70AE = aircraft funding, 70BE = ships, administration and temporary additional duty (TAD), and 70CE= strategic communications staffing)

Fiscal year 1991 shows an uncharacteristic jump in funding. This was due to several unplanned augments necessitated by Desert Shield and Desert Storm in the Middle East. Fiscal year 1992 saw the creation of a separate fund code for family service and child care as quality of life became an important issue. However, this represented only a very small percentage of the total appropriation for that year. Fiscal year 1993 also saw the creation of a new fund code for real property maintenance, which led to another slight increase in the total appropriation. Then fiscal year 1994 saw the total re-construction of the fund codes to completely separate aircraft and ship funding and to create a new fund code for strategic communication staffing.

Table 3 depicts the personnel end strength to work year comparison expressed in terms of man hours for fiscal years 1989 to 1995. Figure 2 depicts this relationship graphically. The personnel end strength figures represent the personnel allowed to be filled for the positions authorized, while the work years represent the number of personnel actually funded for the work completed.

FISCAL YEAR	END STRENGTH	WORK YEARS
1989	4224	4732
1990	4308	4467
1991	4752	4367
1992	4347	4135
1993	4372	4240
1994	4493	4263
1995	4208	4068

Table 3. End Strength to Work Year Comparison (measured in man hours)

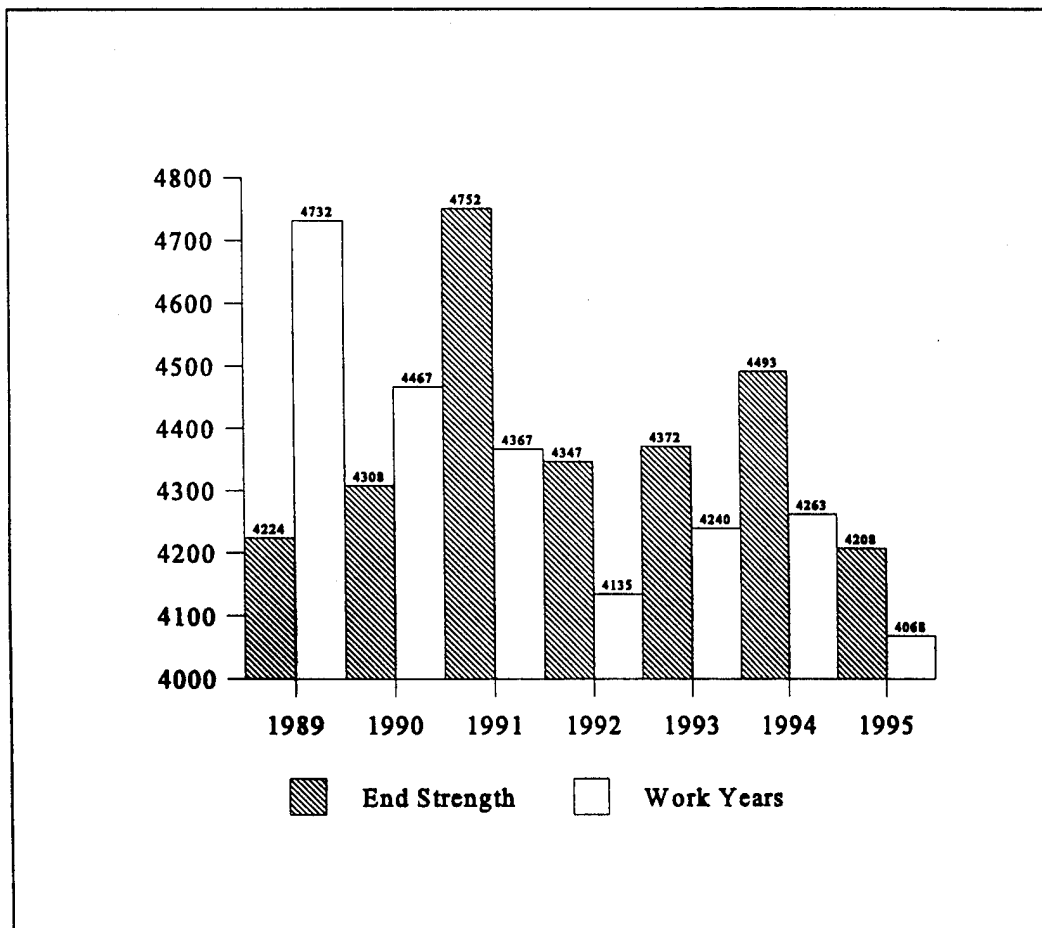


Figure 2. End Strength to Work Year Comparison (measured in man hours)

In analysis of the historical relationship between manpower strength and work load, the work year figures are the most relevant. This is because work years are measuring the amount of time per year actually worked by the command financial management staff. Analyzing these figures shows that the number of work years decreased by over 14% between fiscal years 1989 and 1995 despite slight upswings in fiscal years 1993 and 1994. This is quite significant when compared to the trend in appropriations, which continued to go up, representing the funding required to handle the increase in the mission requirements for COMNAVAIRPAC.

The trend analysis of funding levels and actual years worked reveals the increase in mission requirements of COMNAVAIRPAC consistent with the increase in appropriation levels. However, at the same time, the number of actual personnel funded, as measured in work years, decreased more than 14%. This demonstrates that over the period fiscal year 1989 to the present, COMNAVAIRPAC has been required to accomplish more work with fewer personnel resources.

C. HISTORICAL MANPOWER LEVELS AND WORKLOAD COMPOSITION

1. Historical Manpower Comparison

The next step towards in establishing the framework for determining the critical mass level of financial management staffing at COMNAVAIRPAC is to analyze the financial management positions authorized and filled between fiscal years 1989 and 1995. This analysis is depicted in Table 4 and Figure 3.

The most significant fact evident from this analysis is that the number of positions filled fell from a peak of twenty-four in fiscal year 1989 to eighteen in fiscal year 1995. This represents a decrease from the base of 25%. This is a large reduction in an era when the workload demands placed upon the organization were increasing. The number of positions authorized experienced a similar drop from a peak of 33 in fiscal year 1991 to a low of 23 in fiscal year 1995.

FISCAL YEAR	POSITIONS AUTHORIZED	POSITIONS FILLED	PERCENTAGE FILLED
1987	24	22	91.7
1988	26	23	88.5
1989	24	24	100.0
1990	29	21	72.4
1991	33	20	60.6
1992	27	21	77.8
1993	23	19	82.6
1994	28	19	67.8
1995	23	18	78.3

Table 4. Comparison of Financial Management Positions Authorized and Filled at COMNAVAIRPAC

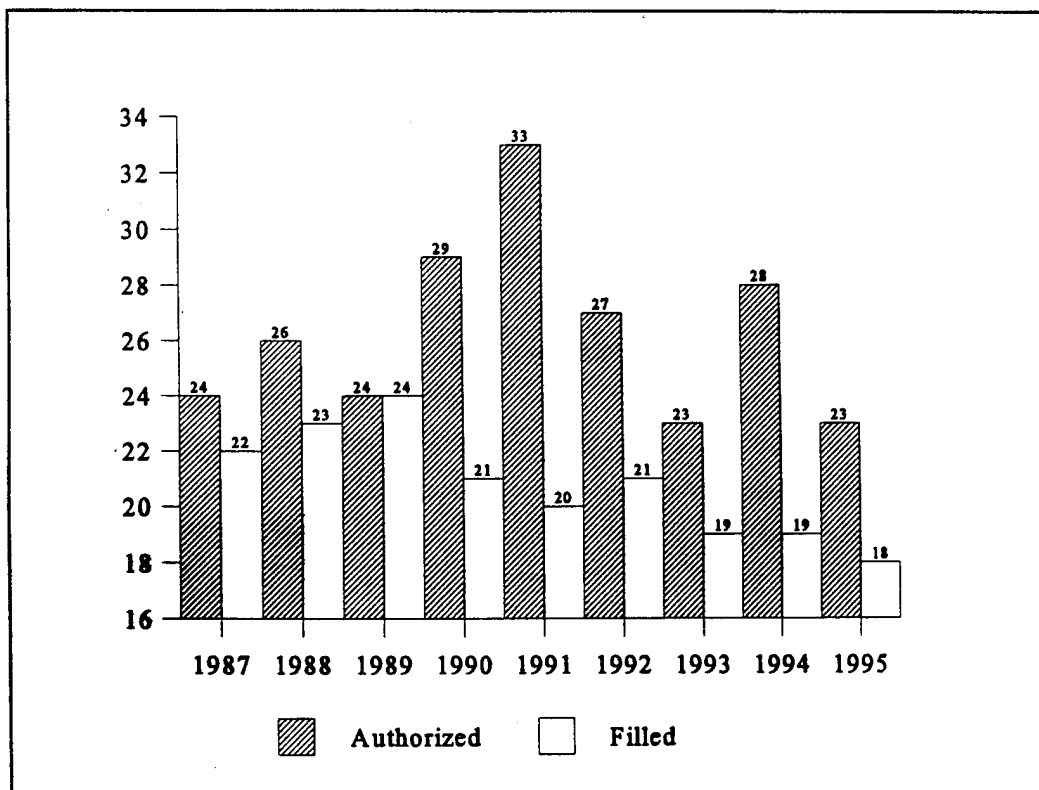


Figure 3. Comparison of Financial Management Positions Authorized and Filled at COMNAVAIRPAC

This is a decrease of 30%. There are two primary reasons why the number of positions filled are almost always lower than the number of positions authorized. The most compelling reason is a hiring freeze which was lifted in 1995. The second reason is the Managing-To-Payroll (MTP) concept which established a cap on the total amount allowed to be expended on employee compensation.

Although this trend analysis does not demonstrate a steady linear decline in the financial management manpower level at COMNAVAIRPAC, the percentage drop across the total period is significant. Manpower levels will now be compared to historic workload trends, and overtime/ compensation time worked.

2. Workload Analysis for Fiscal Years 1989 to 1995

The determination of whether the workload demand on the financial management function at COMNAVAIRPAC has grown between fiscal years 1989 and 1995 was determined by comparing civilian personnel position descriptions, and by evaluating data from the personal interviews conducted with the current occupants of five key positions: budget officer, supervisory financial systems analyst (accounting officer), budget and accounting analyst, budget analyst and accounting technician.

a. Budget Officer (EC 880)

Several additional tasks were added to the budget officer position description when it was updated in 1992. These additions include the responsibility for implementing the Defense Management Review (DMR) decisions within the COMNAVAIRPAC community, including setting policy and procedures; providing financial policy to the COMNAVAIRPAC staff and subordinate units; providing policy and procedures to the field activities concerning changes resulting from conversion to the Defense Accounting and Finance Service (DFAS) from the Navy Authorization Accounting Activities (AAA's); providing policies and procedures to the field activities concerning the Defense Business Operating Fund (DBOF) changes in funding

methodology including reprogramming resources and repositioning funding alignments; and further promoting Equal Employment Opportunity (EEO) and affirmative action programs.

In addition, there are now some requirements in the budget formulation, presentation and execution areas that were not present in the previous position description. In the budget formulation area the most important change occurred in making the budget officer responsible for developing formats, instructions, procedures, forms and policies for the budget estimates of the shore commands, air wings, ships and other COMNAVAIRPAC units. Before the change, the budget officer had these responsibilities for the shore commands only. The budget officer is now also responsible for evaluating, correlating and converting Program Objective Memorandum (POM) decisions, DMR decisions and base closure decisions into budget formulation. This is a significant increase in responsibility.

In the area of budget presentation, the budget officer is now directly responsible for developing and preparing budget exhibits requested by CINCPACFLT and NAVCOMPT. In the O&MN budget alone, the number of exhibits required has risen from 31 to 50 between fiscal years 1989 and 1995, an increase of 61%. This position also is now responsible for submitting the complete COMNAVAIRPAC budget to CINCPACFLT and defending this budget personally during the CINCPACFLT budget review and then to NAVCOMPT budget analysts.

The area of budget execution reflects the greatest increase in responsibilities. The budget officer is now responsible for developing a plan of action to meet the intent of Congress as stated in appropriation language. She also must identify, submit and defend shortfalls to CINCPACFLT at the Mid-year review. She must defend obligation rates to both CINCPACFLT and NAVCOMPT budget analysts. She must sign and issue all funding documents utilizing COMNAVAIRPAC staff funds

and ensure proper utilization compliance with contractual requirements.

The budget officer negotiates funding disputes between commands, and determines cost data collection criteria for all COMNAVAIRPAC activities. She issues the funding documents authorizing obligation of funds, called Resource Authorizations, to all field commands. She is personally responsible for the command for ensuring compliance with the provisions of US Code 1301 (misappropriation) and US Code 1517 (over-obligation). She now also has been granted signature authority and is responsible for propriety and correctness of contracts, Resource Authorizations and all other funding documents issued by COMNAVAIRPAC. Another important responsibility for the budget officer in budget execution is to approve the movement of budget resources classified by major purpose, called functional transfers, that affect COMNAVAIRPAC.

b. Supervisory Financial Systems Analyst (EK 460)

Changes that have been made for this position are reflected in the switch in the title from Resource Management Division Director in the old position description, to Accounting Officer in the 1993 revision. The main responsibility of the position is now the analysis and execution of Operations and Maintenance, Navy (O&MN) funds for COMNAVAIRPAC.

With this responsibility came the job of directing the planning, design, development and installation of new financial systems including the Standard Accounting and Reporting System - Field Level (STARS-FL), the Aviation Cost Evaluation System (ACES) and the Aviation Storekeeper Information Tracking System (ASKIT) for all COMNAVAIRPAC units and staff accounting. This responsibility must be carried out under the auspices of both Financial Management of Resources Operating Procedures (NAVSO P-3013) (operating forces) and Financial Management of Resources Operations and Maintenance

(NAVSO P-3006) (shore activities) guidelines. This responsibility also requires providing technical advice and assistance on the impact of new systems, required procedural changes, erroneous inputs and cash position to the COMNAVAIRPAC Comptroller and Deputy Comptroller, CINCPACFLT Comptroller staff, NAVCOMPT staff, and various other Navy and Marine financial analysts/technicians.

The accounting officer now also is responsible the revision of existing financial systems. This involves maintaining operating policies and procedures, analysis of data contained in reports and statements and identifying problem areas. These financial systems include: the Flying Hour Cost Accounting System (FHCAS), the Integrated Disbursing and Accounting Financial Management System IDAFMS), the Uniform Automated Data Processing System (UADPS), the Ship-board Uniform Automated Data Processing System (SUADPS) and the Naval Aviation Logistics Command Maintenance Information System (NALCOMIS).

The switch in this position title to accounting officer also brought with it the responsibility for conducting accounting policy reviews to ensure accuracy and efficiency in accounting practices throughout the COMNAVAIRPAC claimancy. This requires maintaining close liaison with external organizations including DFAS, COMNAVAIRLANT and CINCPACFLT to ensure standardization and consistency.

Another addition to the responsibilities of the accounting officer requires working with activities including CINCPACFLT and Naval Supply Systems Command (NAVSUPSYSCOM) to ascertain the nature and scope of new financial systems and their impact on existing systems. This includes reviewing flow charts, report layouts and management specifications detailing input and output requirements such as data elements, format, content, frequency and distribution, for programming computer application by the Data Processing Service Activity (DPSA), and ensuring that the systems conform to prescribed requirements. The accounting officer also must ensure that

internal and external reports provide financial data required at all management levels, and that internal controls are in place to ensure all financial transactions are valid and adequately documented.

The final additional responsibility placed upon the accounting officer in the revised position description is to represent COMNAVAIRPAC at meetings and conferences involving plans for change of existing Navy procedures or installing new ones, including all flying hour issues and requirements. The accounting officer now has complete authority to make decisions and commitments within the scope of the more broadly defined responsibility of the position.

c. Budget and Accounting Analyst (EC 860)

The changes in responsibility for this position have resulted largely from the expansion in programs covered and the increased pace in introduction of new automated systems. This position now requires a thorough comprehension of all phases of the DoD and federal budget processes including Planning, Programming and Budgeting System (PPBS), and a thorough knowledge of Ashore Accounting Procedures (P-3006) and Operating Forces Accounting Procedures (P-3013). Knowledge of microcomputer technology is required, along with electronic spreadsheet usage, and other financial management applications through electronic data processing. The holder of this position must also be able to concisely present computer generated financial data to upper management.

The emphasis of this position also has shifted from more straight-forward data and report generation to include application and analysis. Responsibility now exists for identifying and analyzing trends in receipt, obligation and expenditure of funds, and for determining the propriety and cost effectiveness of funding requests. Preparation, analysis and interpretation of the statements/reports on the financial condition of COMNAVAIRPAC generated by STARS-FL now also is required.

As the senior analyst in the Accounting Division, this position also requires the reviewing of unique and complex problems and documents to reconcile all accounts. This includes analysis of accounts over prior and current years to identify significant changes, and providing technical advice and assistance to the accounting officer on these matters. He or she must also coordinate all efforts related to data provision for preparation of the operating budget and expense limitation determination for the Accounting Division.

d. Budget Analyst (ES 820)

This budget analyst position also was expanded with additional tasks when the position description was updated in 1994. One of these additional tasks is to perform STARS-FL budget inquiry and analysis for shore activity financial operating and performance reports. Another additional task is participation in the development and formulation of the budget submission (BS-1) exhibit and the program objective memorandum (POM) process by providing data related to assigned budgetary programs. This includes compiling, reviewing, validating and researching discrepancies in input data from shore stations, COMNAVAIRPAC staff and other sources for compliance and completeness. This includes developing program justifications and variance explanations as required.

With the emergence of the Base Realignment and Closure (BRAC) process over the past few years, more additional responsibilities were created for this position. The budget analyst is now responsible for coordinating the operations and maintenance (O&MN) budget development, formulation and execution for the BRAC budget. This entails ensuring that adequate end strength and funding are budgeted in the O&MN budget when budgeting responsibility for specific items is transferred into and from the BRAC budget, and also that funding marks or augments are executed properly.

The final tasking additions occurred in responsibility for the Civilian Personnel Labor program. The budget

analyst now coordinates this portion of the O&MN budget including management to payroll and end strength authorizations. This involves conducting reviews of Civilian Personnel Labor budget execution data and actual accomplishments as reported in Civilian Personnel Resource Reporting System (CPRRS) reports.

e. Accounting Technician (DT 240)

This position also received additional responsibilities when the position description was updated in 1991. The first was to be able to utilize and develop electronic spread sheets to show status of billings processed to provide the comptroller with timely management information. The second additional responsibility was to provide financial guidance and resolve problems with the subordinate activities related to reimbursable and special funding involving recruiting, special communications and collateral photographic equipment.

Another additional responsibility involves performing monthly analytical computations on the list of operating budget detail credits to determine valid material turned into stores (MTIS) credits that are reimbursable credits to be applied to the reimbursable billings. The final additional responsibility involves reviewing and monitoring various financial reports received from DFAS and other activities. These reports include the Air Ship/Staff Status Report and the Operating Budget Detail Credit Report. The trend in this position as with the Budgeting and Accounting Analyst (ES 820) position is moving away from solely generating data and reports to more monitoring and analysis of information.

3. Historical Analysis of Overtime and Compensation Time

Within the financial management function at COMNAVAIRPAC, both overtime and compensation time are used as measurements of hours worked above the normal, required daily and weekly amounts. Table 5 depicts the trend between fiscal years 1992 and 1994 in overtime and compensation recorded within the

command financial management function. The reason for the more limited time span for these data is that consistent records for overtime and compensation time were not available for years prior to fiscal year 1992. Since the purpose of this study is to test the hypothesis of increased workload demand combined with a decreasing work force, this table

POSITION	FY 1992	FY 1993	FY 1994
Budget Officer	153	6	384
Accounting Officer	--	117	50
Supervisory Staff Accountant	--	35	100
Budget and Accounting Analyst	--	124	98
Budget Analyst	467	490	958
Cost Analyst	--	28	7
Accounting Technician	--	80	45
Financial Systems Analyst	--	8	--
Budget Assistant	--	10	2
Secretary-Office Automation	--	--	7
Total	620	898	1651

Table 5. Overtime and Compensation Time Breakdown (In Hours)

combines overtime and compensation hours recorded. Figure 4 shows the overall trend in overtime and compensation hours.

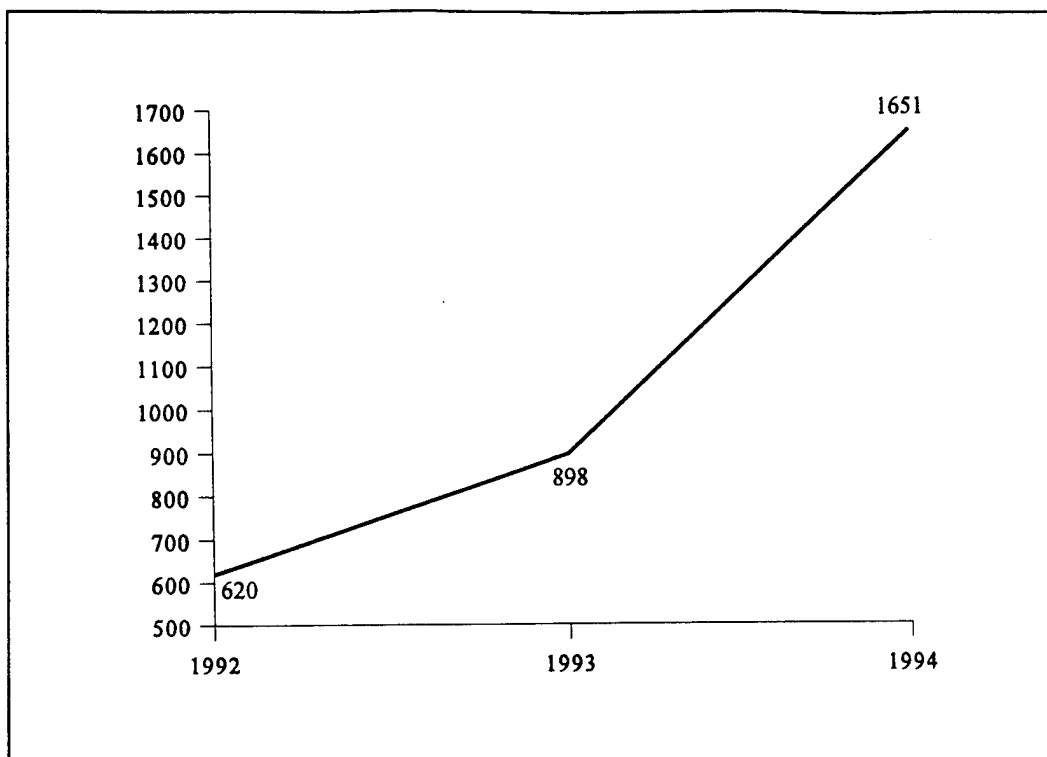


Figure 4. Overtime and Compensation Time Breakdown (in hours)

These figures clearly reveal an increasing trend in the amount of hours worked over standard hours required of 40 hours per week. The change in compensation time and overtime hours recorded between fiscal years 1992 and 1993 was an increase of 44.8%, while the increase between fiscal year 1993 and 1994 was 83.8%. Although final data has not been compiled for fiscal year 1995, the indication so far is that the trend of increasing hours continues. This upward trend in the amount of compensation and overtime hours worked over the three fiscal years is consistent with the sizable increase in the responsibilities of the five key financial management positions analyzed in the previous section of this chapter.

D. HISTORICAL PERSPECTIVE ON MANPOWER UTILIZATION AT COMNAVAIRPAC

During the period from January 15 through June 30, 1993, a CINCPACFLT Manpower Analysis Team (CMAT) conducted an

Efficiency Review of COMNAVAIRPAC operations. The purpose of this review was to determine and develop the Most Efficient Organization (MEO) framework, which describes the organizational structure and manpower requirements needed to accomplish the assigned mission, functions and tasks efficiently and effectively.

In accomplishing this task, the CMAT followed a specific study process. This process included the following steps:

1. Development of Work Center Descriptions (WCDs) based upon required mission functions and tasks.
2. Evaluation and application of approved OPNAV staffing standards to appropriate activity organization components.
3. Evaluation and determination of which organization components or functions could be consolidated, transferred or eliminated.
4. Examination of organization components to preclude fragmentation, excessive layering, and improper use of personnel.
5. Evaluation and determination of proper job design, correct job assignments and the proper distribution of resources.

Table 6 compares the MEO structure to the actual positions filled in the period fiscal year 1992 through 1995 in the COMNAVAIRPAC Comptroller office. This table reveals two very interesting points. The first is that after fiscal year 1992, the overall staffing level has essentially conformed to the MEO structure, although it dropped below it for fiscal year 1995. The second point is the difference between the distribution of budget analyst and accounting technician positions recommended by the MEO and the number actually employed. More budget analysts and fewer accounting technicians have been staffed. Part of the reason for the difference is due to the constraint placed on COMNAVAIRPAC over total number of personnel allowed. The command determined that the nature of the workload demand required

more budget analysts and fewer accounting technicians to meet mission requirements.

In determining the MEO structure, the CMAT broke the comptroller organization down into staff, budget and accounting functions. The major recommendation for the staff function was to add the civilian position of financial systems analyst. The CMAT indicated that this position was required to administer policies for the development of overall financial management systems and to design, develop and implement new or modified systems. The work done by this position would affect all comptroller divisions and user activities.

The MEO structure for the budget function was based on the workload description of planning, directing and administering the operation of the budget function; performing budget year formulation and current year apportionment; performing budget execution; providing civilian manpower control; providing POM program support; providing emergent program support; providing liaison; providing technical advice and assistance; and performing other related tasks.

The workload measurement factors were based on four budgets formulated and apportioned, and 355 user activities advised and assisted per year. Through personnel interviews, task and organizational analysis and review of historical labor data, the CMAT determined a requirement of 848.4 monthly man hours (equivalent to six civilian positions) to accomplish the required tasking. The MEO manpower structure suggested by the CMAT for the budget function included only five positions since the BRAC associated man hours are identified within the budget function. However, one budget analyst is located within the Shore Activities Department as a result of BRAC workload consolidation.

Aside from the Efficiency Review recommendations, a separate draft tasking statement was written for the budget function by the Comptroller and Manpower staffs. The direct

POSITION	MEO	1992	1993	1994	1995
COMPTROLLER DIVISION					
Financial Systems Analyst	1	0	0	0	0
Secretary-Office Automation	1	2	1	1	1
Time Clerk - Office Automation	2	3	2	1	1
BUDGET DIVISION					
Budget Officer	1	2	1	1	1
Budget Analyst	3	6	5	7	7
Budget Assistant	1	1	1	1	1
ACCOUNTING DIVISION					
Financial Systems Manager	1	0	1	1	1
Financial Systems Analyst	1	0	1	1	0
Supply Systems Analyst	0	1	1	0	0
Cost Analyst	1	1	1	1	1
Supervisory Accounting Technician	1	1	1	1	1
Accounting Technician	6	3	3	3	3
Budget and Accounting Analyst	0	1	1	1	1
TOTAL	19	21	19	19	18

Table 6. Comparison of MEO Structure to Actual Manning in COMNAVAIRPAC Comptroller's Operation

tasking was divided up among management, budget year formulation and current year apportionment, budget execution, civilian manpower control, and liaison and technical assistance.

The management task for budgeting expanded the MEO description to include applying policies and directives prescribed by higher authority; providing advice and assistance; reviewing, verifying and approving required

reports; program support functions; reviewing and endorsing incoming and outgoing correspondence; and maintaining liaison. A few of the additional required reports and documents include the monthly Full Time Equivalent Report; the Child Development, Family Center and Family Advocacy Exhibit; and the Aircraft Intermediate Maintenance Department Funding and Manpower Report. The program support functions now required of the budget function include a performance standard measures system for the bachelor quarters, program baseline assessments, inter and intra service support agreements, a Real Property Maintenance Activity Report (RPMA), and special inquiries and data calls.

The budget year formulation and current year apportionment tasking was expanded from the MEO description to include reviewing budget/apportionment calls; developing budget call guidelines; consulting/conferring with personnel pertaining to budget estimates; reviewing submission of budget; analyzing, computing, translating and transcribing program budget line item estimates; developing overhead rates; developing billing rates; compiling and summarizing total organizational budget; preparing presentation of fund consolidated budget recommendations; revising budget recommendations; preparing and submitting COMNAVAIRPAC budget submission; preparing overviews and back-up presentations for budget hearings; reviewing and responding to mark-up reklamas; and preparing and presenting back-up material for reclama review hearings. This last process pertains to the O&MN budget, Official Representation Funds (ORF) budget and Maintenance of Real Property (MRP) budget.

The budget execution tasking was expanded from the MEO description to include developing guidelines and preparing the financial operating plan; developing tentative allocation and distribution documents; reviewing and allocating funds received from the major claimant; monitoring and maintaining fund allocation and distribution; performing funds control and

budgetary accounting; performing periodic reviews; and closing expiring appropriations.

The civilian manpower control tasking was expanded from the MEO description to include coordinating civilian manpower requirements with functional departments and subordinate commands, and assigning employment targets; processing changes to requirements resulting from functional transfers, reorganizations and changing priorities; determining civilian man-year costs and preparing civilian manpower budget exhibits; reviewing all civilian manpower related budget mark-ups and assist in preparation of reclamation; determining civilian manpower impacts of program changes; preparing and ensuring proper maintenance of civilian manpower controls; monitoring civilian manpower employment reports and reviewing other manpower related reports, to include the monthly Full Time Equivalent Report.

The liaison and technical assistance tasking was also expanded from the MEO description. This tasking now included providing liaison and technical assistance to personnel at all levels within the COMNAVAIRPAC staff and subordinate organizations on budgetary and financial matters.

The draft tasking statement also developed potential workload factors for the COMNAVAIRPAC budget function. The first potential workload factor was the number of budgets formulated and executed per year. The second potential workload factor was the number of ORF funded activities budgeted per year. This was estimated at 32 in 1993. The third potential workload factor was the number of MRP funded activities per year. The fourth and final potential workload factor was the number of O&MN funded activities budgeted per year. For 1993, this was broken down as follows: 143 aircraft squadrons; 7 aircraft carriers; 13 air staffs; 27 miscellaneous civilian support units; 16 naval air stations; and 97 air capable ships.

The MEO structure for the accounting function was based on the workload description of planning, directing and administering the operation of the accounting function; applying policies and directives prescribed by higher authority; developing and promulgating COMNAVAIRPAC and CINCPACFLT accounting policies and procedures; performing all accounting operations at COMNAVAIRPAC, including direct and indirect reimbursables and civilian time and attendance; reviewing all accounting and related reports received from subordinate commands; providing COMNAVAIRPAC funding operations; providing field funding operations; providing fund control operations; operating a system of control accounts relative to the Navy Flying Hour Program and CINCPACFLT Temporary Additional Duty (TAD); providing Security Assistance/Foreign Military Sales (SA/FMS) program support, including developing course costs, initiating billing and maintaining accounts; providing liaison and technical assistance; performing ORF budget and accounting support; providing COMNAVAIRPAC TAD fund administration and TAD orders preparation; and performing indirect tasks.

The MEO workload measurement factors were based on 264 incoming reimbursable accounts maintained per year; 139 outgoing reimbursable accounts maintained per year; 208 civilian time and attendance records processed bi-weekly; 40,524 accounting transactions processed per year; 141 FMS courses costed per year; 32 ORF accounts maintained per year; and 2,873 TAD requests processed per year. Through interviews, task and organizational analyses and an operational audit, the CMAT determined a requirement of 1,836.53 monthly man hours (equivalent to 3 enlisted billets and ten civilian positions) to accomplish the required tasking. Therefore, the CMAT recommended a MEO structure for the accounting function of ten civilians.

Aside from the Efficiency Review recommendations, a separate draft tasking statement was also drawn up for the

accounting function by the COMNAVAIRPAC Comptroller and Manpower staffs. This tasking statement was less detailed and divided the accounting direct tasking into management, accounting services, and liaison and technical assistance.

The management function consisted of planning, directing and administering the operation of the Accounting Division; applying policies and directives prescribed by higher authority; providing advice and assistance; reviewing, verifying and approving required reports; reviewing and endorsing incoming and outgoing correspondence; and maintaining liaison.

The accounting services tasking consisted of performing all accounting operations at COMNAVAIRPAC; reviewing all accounting and related reports received from subordinate commands; preparing all bills for transactions at COMNAVAIRPAC; providing proper accounting classifications for invoices; providing command funding operations; providing field funding operations; providing fund control operations; providing allotment holders with periodic statements of fund status; and initiating collection action on uncollectible accounts.

The liaison and technical assistance tasking consisted of providing liaison and technical assistance to all personnel at all levels within the COMNAVAIRPAC staff and subordinate organizations pertaining to accounting and reporting matters.

This draft tasking statement also developed potential workload factors for the COMNAVAIRPAC accounting function. The first suggested workload factor was the number of COMNAVAIRPAC headquarters accounting transactions processed monthly. The second suggested workload factor was the number of Civilian Time & Attendance Records processed bi-weekly. The third and final suggested workload factor was the number of reimbursable accounts maintained monthly.

A draft statement was also drawn up by the COMNAVAIRPAC Comptroller and Manpower staffs for the staff function of the comptroller operation, aside from the Efficiency Report recom-

mendations. This statement concurred with the workload description of the CMAT Efficiency Review for the most part, especially in the area of administration of COMNAVAIRPAC financial management systems. The key difference was that the draft tasking statement made no mention of adding a financial systems analyst to the staff function.

It is appropriate to compare the CMAT tasking descriptions with the draft tasking statements separately prepared by the COMNAVAIRPAC Comptroller and Manpower staffs for the staff, budget and accounting functions. The differences in the tasking statements provide a clear explanation for the divergence between the MEO recommended level of budget analysts, accounting technicians and financial systems analysts, and level of personnel actually employed in these positions. Specifically, there is a difference in view over the workload distribution among the accounting and budget functions between the CMAT and COMNAVAIRPAC.

E. SUMMARY

The data presented in this chapter demonstrated a fairly strong case for the COMNAVAIRPAC contention that in an era of fiscal constraint and dwindling personnel resources, workload demand has grown steadily. The data presented raises the question: How long does an organization have to operate in this environment before they reach the point where they can no longer fully accomplish their mission? The trends presented in this chapter showing rising workload demand and decreasing personnel resources in an environment of fiscal constraint suggest that this point may have been reached or even exceeded at COMNAVAIRPAC.

Chapter IV further analyzes the data presented in this chapter. Suggestions on how to approach and resolve this problem are presented. An attempt is made at determining the critical mass and core financial management position requirements at COMNAVAIRPAC in the face of further impending reduc-

tions in the civilian work force. This critical mass level of staffing is estimated to determine if it is possible to implement, and what type of automated processing (ADP) support and training will be required to support it.

IV. APPLICATION OF THE CRITICAL MASS AND CORE RESOURCE CONCEPTS TO THE COMNAVAIRPAC COMPTROLLER OPERATION

A. INTRODUCTION

The previous chapter provided data on funding, manpower, the utilization of manpower and the workload demand for the financial management function at COMNAVAIRPAC. The next step is to apply the critical mass and core resource model and concepts to determine how close the command is staffed presently relative to minimums indicated in the model.

As defined in Chapter II, critical mass is that minimum level of program that is absolutely essential to effectively perform workload and mission requirements. The financial and staff resources required to support critical mass performance are referred to as core resources. The core resource in this case is the minimum staff required at COMNAVAIRPAC to effectively accomplish the financial management function at the level of performance demanded by the COMNAVAIRPAC comptroller, commanding officer and a variety of external clients including CINCPACFLT and NAVCOMPT.

The first part of this chapter provides an analysis of the data presented in Chapter III to highlight the trends evident in manning levels, in workload demand as illustrated by the increase tasking required in the updated versions of position descriptions, and the increase in overtime and compensation time worked. This analysis indicates that the critical mass level for the financial management function at COMNAVAIRPAC already has been reached, and that core resources are below that necessary to perform effectively given the existing workload demand. The second part of this chapter analyzes the consequences of continuous cutback management, and what happens when employees are worked beyond the critical mass and core resource levels. This analysis applies the financial stress recognition and management model described in Chapter II to the present day circumstances at COMNAVAIRPAC.

The third and final section of this chapter provides suggestions on how to approach and resolve the staff resource problem now faced by the COMNAVAIRPAC Comptroller office, along with suggestions on the type of ADP support and training that will be required to adequately support the critical mass level staff.

In the course of this chapter, the remainder of the research questions posed in Chapter I are addressed:

1. Can a critical mass level of civilian financial management staff required to support the comptroller function at COMNAVAIRPAC be defined?
2. How could a critical mass level of civilian financial management staff be justified?
3. What are the essential financial management functions at COMNAVAIRPAC required to successfully meet internal and external demands?
4. Can workload requirements be matched to critical mass staffing levels to justify the civilian financial management staff and funding support in the COMNAVAIRPAC comptroller organization?
5. What level of ADP system support and training would be required to maintain a smaller civilian financial management staff?

B. THE CRITICAL MASS LEVEL OF STAFFING IN THE FINANCIAL MANAGEMENT FUNCTION AT COMNAVAIRPAC

The most compelling trends in the data presented in an attempt to apply the critical mass and core resource concepts to the financial management function at COMNAVAIRPAC are found in the analysis of the actual number of positions filled and the workload demand. The trend in workload demand was measured by the increased tasking in updated position descriptions and in the amount of overtime and compensation time recorded over the period between fiscal years 1989-1995. Beginning with the data on positions authorized and filled, the decreasing trend in the actual number of people employed in the financial management function at COMNAVAIRPAC between fiscal years 1989 and 1995 becomes quite apparent.

The number of positions actually filled drops from a peak of twenty-four in 1989 to eighteen in 1995, representing a decrease of 25%. These figures then correspond to the decrease in the amount of man hours per year actually worked by the financial management staff as measured in work years, as depicted in Table 3 in Chapter III. The number of man years actually worked dropped from a peak of 4732 in 1989, to a low of 4068 in 1995, or a decrease of about 14%. The impact of these figures is more pronounced when compared to the increasing trend of workload demanded.

The first measure of workload demand analyzed was the change in the tasking requirements for the financial management positions of budget officer (EC 880), accounting officer (EK 460), budget and accounting analyst (EC 860), budget analyst (ES 820) and accounting technician (DT 240). When analyzing the comparison of the last two position descriptions and incorporating in the data from personal interviews with the current holders of each position, the dramatic increase in the requirements for each of these positions for the period analyzed is quite evident. The effects of these changes were most evident for the positions of budget officer and accounting officer.

If the abnormal increases in tasking during fiscal year 1991 are discounted due to the effects of the Desert Shield and Desert Storm operations, many of the additions to the tasking load can be attributed to changes and additions to DoN and DoD programs and policies. The primary programs and policies that reflected these changes included the POM process, the BRAC process, the DMR decision process, the DBOF process and the change from the use of Navy AAA's for financial accounting to the consolidation of financial management for all services under DFAS. Each of these changes in DoN and DoD programs and policies required additional financial reporting from the COMNAVAIRPAC financial management function.

These changes and additions to DoN and DoD programs and policies also resulted in development of new automated financial tracking systems such as STARS-FL, ACES and ASKIT. These new automated programs required additional training for the technicians and managers who utilize these systems. The utilization of these new systems also resulted in the need for the creation and analysis of additional financial reports.

The essential point is that all of these increases in required tasking and workload have occurred in an environment of decreasing personnel resources. This continuing trend towards increasing workload demand and decreasing personnel resources while under fiscal constraint conditions, further illustrates that the financial management function at COMNAVAIRPAC is caught in an environment of financial stress that must be very carefully managed and which extracts a heavy toll in stress on command staff and leadership.

The second measure of workload demand illustrated in Chapter III was the dramatically increasing trend of overtime and compensation time worked, as shown in Table 5 and Figure 4. The 44.8% increase in overtime and compensation time worked between fiscal years 1992 and 1993, and the 83.8% increase between fiscal years 1993 and 1994, along with the strong indication that this upward trend is continuing in fiscal year 1995, is another strong indication that the financial management function at COMNAVAIRPAC is being asked to handle an increased workload demand with decreasing personnel resources. This is even more evident when the policy of the comptroller has been to discourage staff from working overtime using compensation time.

These two measures of increasing workload demand in combination with the data on steadily decreasing manpower and an environment of fiscal constraint, demonstrate that the COMNAVAIRPAC financial management has reached and has fallen below the critical mass level of manning.

One measure of critical mass performance levels is the point at which the workload demand and mission requirements can no longer be met with the given level of resources utilized at a normal rate. A normal rate in this case would be defined as an eight hour work day or forty hour work week. The increased trend in the number of overtime and compensation time hours worked is one indication that the normal rate of utilization has been vastly exceeded.

Using these data, it appears that the critical mass level of staffing for the COMNAVAIRPAC financial management function was reached between fiscal years 1992 and 1993, when the amount of overtime and compensation time worked rose by 44.8%. Since complete data on the actual amount of overtime and compensation time worked was not available prior to fiscal year 1992, it is entirely possible that the critical mass level of staffing was reached during or just prior to fiscal year 1992. The actual core resource level would then be the financial management staff in place at the point where all workload and mission requirements were accomplished within a normal work day and work week. This level was reached some time prior to or during fiscal year 1992.

C. THE CONSEQUENCES OF CUTBACK MANAGEMENT AND STAFFING BELOW THE CRITICAL MASS LEVEL OF RESOURCE UTILIZATION

Based on the model of fiscal stress management presented in Chapter II, the consequences of constant resource cutback and of reaching and then falling below the critical mass level of core resource utilization are damaging to both the individual employee and the organization. The effects for individual employees show in morale and attitude. The tension and stress generated in an environment of increasing workload demand and personnel resource reductions takes a high toll on employees. Inability to provide required training and reduced capability to provide incentives to employees under these conditions will cause employee morale to suffer further (Jones, 1985, p. 107). The strongest willed and most loyal

employees will be able to operate more or less efficiently under these conditions for a greater amount of time than the majority of employees. However, even the strongest willed and most loyal employees have their breaking points, and the organization must make an attempt to recognize this fact and avoid its occurrence.

From the interviews conducted with COMNAVAIRPAC financial management personnel, and through a review of the turnover of personnel in financial management positions between fiscal years 1989-1995, it may be concluded that COMNAVAIRPAC has yet to reach the point where employee morale is dramatically low, or where the turnover rate is alarming. As alternative employment opportunities disappeared due to budget cutbacks in the San Diego area, the COMNAVAIRPAC turnover rate remained fairly constant and then dropped over the last few years. However, this does not mean that the financial management function at COMNAVAIRPAC does not have a staffing problem. The signs of stress and anxiety caused by utilization of resources past the critical mass level are evident. Future decreases in manpower and increases in workload will most likely result in more severe staff stress, morale and perhaps even turnover problems.

From the general perspective of organizations undergoing budget cutbacks, the major consequence of cutback management and of falling below the critical mass level of resource comes in the form of reduced effectiveness and productivity, and in some instances institutionalized cynicism. Much of this productivity decrease is due to the morale effects resulting from this phenomenon. The ability to maintain a sufficient level of training and re-training, along with maintaining some type of incentive system are important factors in preventing morale from dropping, and thus avoiding subsequent losses of productivity. Decision makers operating in resource constrained environments must realize that resource cuts cannot be based exclusively on informal, but convenient decision

rules and attitudes such as "we can do better with less." Sustaining productivity, work quality and employee adaptability using other motivational resources must also be considered (Jones, 1985, p. 103). Reduction of workload by "winnowing out" less important tasks and workload requirements in setting work priorities is essential.

By all indications from the interviews conducted, it seems that the staff serving in the financial management function at COMNAVAIRPAC have done a good job of recognizing the importance of employee adaptability, work quality and productivity in the management of their employees. The ability of the financial management function at COMNAVAIRPAC to operate as efficiently and effectively as they have in an environment of resource constraint and workload demand increase is commendable. The question remains, how much longer can they continue to efficiently produce under such circumstances? According to the documentation and theory based on the experience of other public organizations reviewed in this chapter and earlier in Chapter II, one would tend to believe that the answer to this question is not much longer.

Some greater degree of centralization of decision making may result under such conditions of restraint according to the models used in this study. In the long term however, such centralization is likely to be a poor response (Jones, 1985, p. 105). The degree of centralization of authority in resource restrained environments may not be the most important variable in explaining successful crisis resolution. Smoothing the impact of resource cuts, continuity of leadership, the extent to which crisis management is politicized, the ability to define and communicate organizational mission and goals, and the extent to which service and workload priorities are reevaluated and budgeted may be more important variables in managing fiscal stress effectively (Jones, 1985, p. 105).

From the analysis of position descriptions, past and present, and from the interviews conducted with current

position holders, it does not appear that COMNAVAIRPAC has resorted to the type of centralization of the financial management function that can prove harmful in the long run. In fact, the situation at COMNAVAIRPAC seems to be the reverse. Many important decisions once concentrated under the comptroller have been delegated to the budget officer and the accounting officer. They in turn have delegated some of their responsibility to their senior subordinates. Part of the reason the command has been able to avoid a high degree of centralization of decision making is due to its ability to smooth the impact of resource reductions, the presence of continuity of leadership (the comptroller), the ability to define and communicate organizational mission and goals, and the ability to establish service and workload priorities.

The effectiveness of COMNAVAIRPAC ability to recognize and manage financial stress and resource restraint may be analyzed by applying the model outlined in Chapter II. Through the application of this model to the data presented in Chapter III, the case can be made for the financial management function at COMNAVAIRPAC being in the mature stages of phase eight or the early stages of phase nine of management of fiscal stress. This would place them between the categories of prolonged acute scarcity and long-term austerity (Jones, 1985, pp. 90-91). The characteristics of these two phases that are present in the present day operation at COMNAVAIRPAC are: acceptance of continued resource reductions, implementation of long-term program and financial planning, revaluation of missions and objectives, modification and examination of budgetary strategies, undertaking of function and responsibility reorganization, and the redesign of planning and budgeting service/workload priorities over the long term.

If this conclusion is valid then COMNAVAIRPAC should continue through an extended period of long-term austerity, where expenditures are constrained in constant dollars relative to planned expenditures. This would be followed by

financial recovery under continued restraint, where COMNAVAIRPAC would adjust to fiscal and resource constraint through reduced expenditure, program modification and improved financial and program management (Jones, 1985, p. 91). Process re-engineering as a means of modifying program and workload would seem to be an essential element of continued successful adaptation to fiscal stress in the COMNAVAIRPAC financial management function.

D. MANAGING WITHIN THE RESOURCE RESTRAINT PROBLEMS AT COMNAVAIRPAC

The problems that have arisen within the financial management function at COMNAVAIRPAC due to personnel resource reductions and increased workload demand have been discussed in detail. One factor that may be contributing to some of the workload problems yet to be discussed in detail is efficiency. That is, are all of the resources available to the financial management function being utilized efficiently?

Based upon the interviews conducted with key financial management staff and from other COMNAVAIRPAC data, the answer to this question appears to be: no. Several of the comments made concerning inefficiency were directed at the STARS-FL system. The general impression was that STARS-FL is an inadequate financial information system, and more of a glorified accounting system with only a limited statistical account capability. Another concern with this system is that it requires computer programming ability to fully utilize its data manipulation capabilities, and this expertise is lacking in the financial management function at COMNAVAIRPAC.

The overall opinion seemed to be that the effort required to operate STARS-FL and other financial data information systems is not worth the value of the limited reporting output that can be produced from these systems. The other area of concern regarding the financial information reporting systems revolved around the creation of budget exhibits. The opinion was that the budget data incorporated into the budget exhibits

is not scrutinized carefully enough at higher levels, which results in numerous off-line inquiries and an inefficient use of the financial management analyst time.

Another significant area of concern within the financial management function having to do with efficiency is the issue of redundancy. In the area of budget exhibits, both the base support exhibit and the civilian personnel data base contain detailed information which is also included in several separate exhibits. This would allow for the consolidation of the individual exhibits into the base support exhibit and the civilian personnel data base to prevent duplication of information in the future.

In the area of tasking and reporting requirements, the same financial data is reported to both the financial and program (POM) hierarchies in the Navy, only utilizing different reporting mediums and formats. Similarly, the exact same special tasking and inquiries originate from both the financial and program hierarchies. Resolving this problem is out of the scope of the commands' capability of influence, but it is perhaps indicative of a Navy-wide problem.

A final area of redundancy involves the current automated systems utilized. The first problem in this area is that the performance standard measures system used to track the costs of operating the bachelor quarters is off-line from the financial system. The second problem is that the internal systems located at various COMNAVAIRPAC activities are used to supplement the data collection function of the authorized financial program systems, resulting in delays and duplication of data.

Various suggestions have been made by command financial management staff members to help streamline their operation and to increase efficiency and effectiveness. One suggestion is to eliminate the redundancy inherent in budget exhibits by allowing the integration of reporting systems. Another suggestion is to reduce the number of budget exhibits to a

more viable number that will eliminate much of the present duplication in reporting. A third suggestion is to develop and utilize compatible and uniform software for budget development to prevent delays caused by incompatible systems and off-line processing.

A fourth suggestion to help streamline the operation and to increase efficiency and effectiveness is to enhance the existing data base configuration for all existing systems to provide greater report and detail capability, thus reducing the need for manual record keeping and redundant systems. A fifth suggestion is to provide direct access to the data bases for data retrieval and manipulation to facilitate information exchange between organizational levels. The sixth and final suggestion is to allow for the generation of budget exhibits internally on the financial systems. For example, the capability to generate the base support exhibit from within the STARS-FL system would enhance financial reporting system efficiency.

All of these suggestions are aimed at increasing the operational efficiency and effectiveness of the financial management function at COMNAVAIRPAC to help alleviate some of the pressure and problems that have resulted from constrained resources and increased tasking. A critical consideration in accomplishing this goal is better and more structured training and support available for both existing and proposed automated data systems. In the course of interviews, the subject of lack of computer programming expertise came up. To fully utilize the capabilities of both existing and proposed systems, system operators and managers must be trained thoroughly in both the generation and manipulation of software and data.

This problem can be approached in one of two ways. Either the operating systems and data bases can be re-configured to allow for more accessibility to data for the end user, or the operator can be better trained in the aspects of

computer programming required to fully utilize the data manipulation capabilities of the systems. The solution that would seem to have the most long-term benefits for COMNAVAIRPAC, although initially quite costly, would be to re-configure the automated systems to make them more user friendly and data useful. This would eliminate much of the frustration now present in working with these systems, increase employee morale, increase productivity and efficiency, and increase effectiveness for the organization as a whole over the long-term.

E. SUMMARY

In this chapter major trends in the data analysis presented in Chapter III were analyzed indicating the fact that the financial management function at COMNAVAIRPAC is operating in an environment of fiscal constraint, and increasing workload demand. In the process of this analysis the suggestion was made that the financial management function at COMNAVAIRPAC has reached and fallen below a critical mass level of staff resource availability. This point was reached in or around fiscal year 1992, when the recorded level of overtime and compensation time worked rose dramatically.

The potential consequences of constant cutback management and of operating below critical mass level of resources were then presented. The implications for both the individual employee and the organization as a whole are quite damaging in terms of the employees physical condition and morale, and the productivity level of the organization. The model of the recognition and management of fiscal stress and resource restraint was applied to COMNAVAIRPAC, and the suggestion was made that this model may be used to help detect and minimize potentially damaging outcomes.

Finally, opportunities for increased operational efficiency were reviewed in the context of the financial management function at COMNAVAIRPAC. Suggestions were made to eliminate

or at least temper the effects of the present ADP inefficiencies. This was followed by suggestions on how to better utilize ADP assets through re-configuration and provision of training.

In Chapter V, conclusions regarding the application of the critical mass and core resource concepts to the financial management function at COMNAVAIRPAC and to DoD as a whole are drawn. The chapter concludes with further research topics that might be pursued to follow-up on the findings of this thesis.

V. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

This thesis sought to determine the impact of reduction in federal civilian employees, as set out in the National Performance Review, the Federal Workforce Restructuring Act of 1994, and other actions on the financial management function at COMNAVAIRPAC. Specifically, the objective was to determine the critical mass or minimum level of civilian personnel staff required to support the financial management function at COMNAVAIRPAC.

Through trend analysis of funding, manpower levels and workload demand, the conclusion is that the financial management function at COMNAVAIRPAC has been and currently is operating in an environment of fiscal and personnel resource restraint, under conditions of increasing workload. More specifically, the conclusion was reached that the level of financial management personnel at COMNAVAIRPAC has dropped to and fallen below a critical mass level of staff resources needed. The data suggested that the critical mass point probably was reached in fiscal year 1992 when the recorded level of staff compensation time and overtime worked rose dramatically.

A fiscal stress model was applied to the financial management function at COMNAVAIRPAC to help detect and minimize potential outcomes resulting from falling below a critical mass level of staff resource availability while operating in an environment of fiscal and resource restraint and an increasing workload demand. Through personal interviews conducted with COMNAVAIRPAC financial management staff members, the conclusion is that a good job has been done in recognizing the key factors involved in managing employees under such restraint conditions. Employee adaptability, and the ability to sustain work quality and productivity are key indicators of successful restraint management.

The result has been that the financial management function at COMNAVAIRPAC has operated effectively and efficiently under stressful circumstances. However, the trend analysis performed on and the documentation and theory reviewed on the experience of other public organizations suggest that the ability to perform effectively and efficiently may not be sustainable, particularly if additional staff reductions are made.

This study concluded with a summary of suggestions to help counteract the effects of the staff reductions, and to increase organizational effectiveness and efficiency. These suggestions addressed the need for the command to utilize existing ADP resources more effectively. Existing automated financial reporting systems appear to be sufficient to handle the increasing workload demand if better utilized. Two suggestions to improve efficiency are to more thoroughly train financial management computer operators in computer programming they are now expected to use proficiently, and/or to re-configure financial management reporting systems to make them more user friendly and their data more useful.

On the basis of the thesis research, the key issues raised in Chapter I may be answered as follows:

Question 1: What are the essential financial management functions that are required to successfully meet the internal and external demands?

Finding: The task of identifying the specific financial management functions required to successfully meet internal and external demands is difficult to answer. The budgeting, accounting and comptroller/administrative functions are all essential to the comptroller operation to meet workload demand. These functions, if fully staffed, would allow the successful completion of workload requirements while utilizing the personnel resources at a normal rate. For the purpose of this study, a normal rate was defined as an eight hour day or a forty hour work week.

Question 2: What have been the historical staffing and funding levels of the financial management function at COMNAVAIRPAC?

Finding: This question is addressed specifically in Chapter III in Tables 1-4 and Figures 1-3. Tables 1 and 2 and Figure 1 show a steady rise in funding levels, due in part to the creation of new fund codes to account for additional tasking, with a large jump in fiscal year 1991 due to Desert Shield and Desert Storm.

Table 3 and Figure 2 show a 14% decrease in the total amount of time per year actually worked by the command financial management staff during the period fiscal year 1989-1995, indicating command priority setting. This is a significant decrease when compared to the trend in appropriations, which continued to increase. The level of appropriation represents the funding required to meet the increase in the mission requirements for COMNAVAIRPAC.

Table 4 and Figure 3 showed a 25% decrease in command's financial management staff positions filled during the period fiscal year 1989-1995, and a 30% decrease in positions authorized during the period fiscal year 1991-1995. Although this trend is not a steady, linear decline in the financial management staffing level at COMNAVAIRPAC, the percentage drop across the total period is very significant.

Question 3: How is the financial management workload defined and measured in the COMNAVAIRPAC comptroller organization?

Finding: The workload for the financial management function at COMNAVAIRPAC was defined for the purpose of this study by the taskings required for each financial management position description, by descriptions of work actually done gathered in personal interviews, and by the review of results of an Efficiency Review conducted by the CMAT in 1993. These data were used to create a set of tasking descriptions for

each financial management staff position analyzed using the (two) most current position descriptions.

The measurement of workload was augmented by compensation time and overtime hours worked during the period fiscal year 1992-1994. This analysis showed the magnitude of the increase in workload demand. Workload was also measured using the factors determined to be appropriate by the CMAT and the COMNAVAIRPAC comptroller and manpower divisions. The workload measurement factors for the budgeting function included the number of budgets formulated and executed per year, the number of ORF activities budgeted per year, the number of MRP activities budgeted per year, and the number of O&MN activities budgeted per year. The workload measurement factors for the accounting function included the number of COMNAVAIRPAC headquarters accounting transactions processed monthly, the number of Civilian Time & Attendance Records processed bi-weekly, and the number of reimbursable accounts maintained monthly.

Question 4: How has this workload level changed between fiscal years 1989 and 1995?

Finding: Workload change was measured utilizing both the compensation time/overtime hours worked and comparison of the two most recent position descriptions showing increasing responsibilities for five key financial management staff positions. In both instances, strong evidence is available indicating that the workload demand required of the financial management staff at COMNAVAIRPAC has increased greatly during the period fiscal year 1989-1995. The compensation time/overtime hours trend analysis indicated an increase of approximately 45% from fiscal year 1992 to 1993, and an increase of roughly 84% from fiscal year 1993 to 1994. These are sizable increases under any circumstances but almost alarming during a period when staff was reduced.

Question 5: Can a critical mass level of civilian financial management required to support the comptroller function at COMNAVAIRPAC be defined?

Finding: Applying the definition for critical mass employed in Chapter II, the trend analysis indicating the large increase in workload demand, and the steadily decreasing manpower level in the financial management function at COMNAVAIRPAC, the conclusion is reached that the critical mass level of staffing is no longer present in the command. The trend analysis of compensation time and overtime worked (Table 5 and Figure 4) indicate that the critical mass level of staff resources needed to perform the workload function effectively without consistently over stressing financial management personnel has not been present since fiscal year 1992.

Question 6: How could a critical mass level of civilian financial management staff be justified?

Finding: The most significant justification is in the increasing trend of taskings demanded of the financial management staff, and in the amount of compensation and overtime hours worked. This study points out that increased stress, decreased morale, possibly increased personnel turnover, along with decreased command productivity is a genuine threat and consequences of working existing staff below the critical mass staffing level.

Question 7: Can workload requirements be matched to critical mass staffing levels to justify the size of the present civilian financial management staff and funding support in the COMNAVAIRPAC comptroller organization?

Finding: As noted under the previous finding the data presented in this chapter clearly shows that the current workload demand on the financial management staff far exceeds that level that would be performed by a critical mass level staff. The present staff is over-worked according to the critical mass and core resource documentation and theory presented in this study. The funding support received by COMNAVAIRPAC, represented by its annual appropriation, appears to justify a staff larger than the existing level given current workload requirements.

Question 8: What level of ADP system support and training would be required to maintain an even smaller civilian financial management staff?

Finding: The COMNAVAIRPAC financial management function is currently staffed below the critical mass level. Therefore, the models utilized in this study do not justify any further reductions in staff size. However, the efficiency of the current automated financial reporting systems could be increased in several ways. The first option would be to thoroughly train both operators and managers in computer programming to fully realize the reporting and analysis capabilities of current systems. The second option, very beneficial in the long-run, would be to re-configure the existing systems to become more user friendly and their data more useful.

B. RECOMMENDATIONS FOR FURTHER RESEARCH

The first suggestion for further research would be to expand the scope of this study beyond COMNAVAIRPAC headquarters. This would entail selecting a few or all COMNAVAIRPAC air stations, and performing the same type of analysis as done on this thesis. This would assist COMNAVAIRPAC in defining the workload demand at subordinate commands and how well each command is coping with the restrained fiscal and personnel resource environment.

A second suggestion for further research would be to apply the exact same approach to COMNAVAIRLANT. This would provide potentially interesting data to contrast the staffing, workload and requirements of the two commands.

A third and final suggestion for further research would be to apply this approach to a non-aviation related activity. This would provide a comparison of workload requirements for different types of activities. Possible examples of activities to study would be COMNAVSURFPAC and COMNAVSUBPAC.



APPENDIX

THE ASSISTANT SECRETARY OF THE NAVY
(FINANCIAL MANAGEMENT)
WASHINGTON, D.C. 20360-1000

OCT 25 1994

MEMORANDUM FOR DISTRIBUTION

Subj: STREAMLINING THE PLANNING, PROGRAMMING AND BUDGETING
SYSTEM PROCESSES

The National Performance Review recommended the reduction of 252,000 positions in the federal workforce. Most of this reduction is to be taken against supervisors, headquarters staffs, personnel specialists, budget analysts, procurement specialists, accountants, and auditors. The Review also cited the need to streamline the budget process.

When specifically addressing the financial management community, the Review recognized the need to implement updated financial systems and process changes before personnel reductions should be taken, noting that premature drawdown in this area would likely result in more serious financial management problems. While I wholeheartedly agree with the Review's assessment, the UnderSecretary of Defense (Personnel and Readiness) has recommended across-the-board reductions in financial management, personnel, acquisition and administrative functional areas in fiscal years 1994-2001. For us, this would result in the reduction of over 3,000 financial management positions, including auditors.

In order to assess our ability to accommodate the financial management workforce reduction without exacerbating the serious financial management problems we already have, I would like to begin an immediate review of all aspects of the financial management process for improvement and streamlining. I believe long-term improvements can be made through increased automation; a detailed review of the budget formulation process, to include the requirement and format of various budget exhibits; and a review of the funds allocation and control processes. I recognize that much of the process is controlled outside the Department of the Navy, but I am prepared to take recommendations to higher authority where appropriate.

Since you are involved on a daily basis, I know that you have recommendations which will help improve and streamline the process. I plan to establish a task force on the subject and would like a knowledgeable person from your organization as a member. Please contact my Principal Deputy, Ms. Gladys J. Commons, by 2 November 1994 with the name and telephone number of your representative. I appreciate your support in this critical endeavor.

Deborah P. Christie

DEBORAH P. CHRISTIE
Assistant Secretary of the Navy
(Financial Management)

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